

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/B2004/003959

International filing date (day/month/year)  
02.12.2004

Priority date (day/month/year)  
10.12.2003

International Patent Classification (IPC) or both national classification and IPC  
C09B29/085, C09B29/095, C09B29/44, C09B29/08, C09D11/00

Applicant  
CLARIANT INTERNATIONAL LTD

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl  
Fax: +31 70 340 - 3016

Authorized Officer

Ketterer, M

Telephone No. +31 70 340-3645



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**International application No.  
PCT/IB2004/003959

AP20 Rec'd PCT/PTO 09 JUN 2006

**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/B2004/003959

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-8
	No: Claims	
Inventive step (IS)	Yes: Claims	1-8
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

PCT/IB2004/003959

V. Reference is made to the following documents:

D1: WO -A- 2004/035690

D2: GB -A- 0 909 843

D3: WO -A- 95/20014

V.1. The current application seems to fulfill the requirements with regard to novelty, inventivity and industrial applicability as set out in Article 33(1) PCT.

V.1.1. The problem underlying the current application can be seen (vis à vis D2/D3) as 'providing new alternative dispersive dyes to colour or print hydrophobic materials like textiles (polyester, cellulose acetat) resp. for mass colouration of polymers as well as for the ink jet printing technique resp. hot-melt process'.

V.1.2. Regarding formula (1) of the current application, D2 discloses a dyestuff bearing a methyl group in the position of R5 (see example 40). It is used to colour cellulose acetat. In col. 2, page 1 of D2, a list of preferred chemical groups is given for the substructure X of the molecule, thereby methyl carbonyl is mentioned as the only carbonyl linked group. Proposed is also phenyl, but not phenyl carbonyl. C-pentanone resp. c-hexanone rings, which are defined for R5 in the application as well, are not mentioned in D2, either. The dyestuffs of D2 solve the same technical problem as mentioned above. A skilled person would under certain circumstances choose methyl carbonyl in the position of X, but not phenyl carbonyl. Furthermore, carbonyl is only an optional feature in D2 and therefore not critical as in the current application. Current claims 1-8 therefore seem not to be obvious from D2.

V.1.3. D3 describes the preparation of a dyestuff also bearing a methyl group in the position of R5 (see example 64 as well as the table on page 18) and which is also used to colour cellulose acetat. The dyestuffs of D3 solve the same technical problem as the one of the current application. No hint is given in D3 for a phenyl carbonyl group in the ester function. Claims 1-8 therefore seem to be not obvious from D3.

As D2 and D3 miss this critical feature, also a combination D2/D3 would not lead a skilled person to the dyestuffs as defined in current claim 1.

VII. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 is not mentioned in the description, nor are these documents identified therein.